

A CASE OF HYDRO-NEPHROSIS OF MOVABLE KIDNEY; HEMATURIA FROM TORSION OF PEDICLE; NE-PHRECTOMY; RECOVERY.*

By J. WILSON SHIELDS, M. D., and C. C. LEVISON, M. D., San Francisco.

J. B. Male; baker; 37; admitted to the City and County Hospital March 27, 1905. Family history unknown; denies venereal history; is not alcoholic.

Previous history: Twenty-five years ago was struck in the back, right side, by clod of earth; caused much pain and hematuria, which lasted a day. About a year later was thrown from a horse, this injury also causing hematuria for a day. About 20 years ago fell on a steel bar, striking right groin, and saw slight amount of blood intermixed with urine, which persisted for a day.

Six months before entering the hospital, had a severe fit of sneezing, lasting fully an hour, and says he felt something give way in his abdomen. A day or so later a swelling the size of a hen's egg appeared to right of and a little below umbilicus, and this swelling would disappear, with an increase in the amount of urine voided, to reappear at a later period somewhat increased in size. During all this time patient complained of dull, aching pain in the right lumbar region. Just previous to entering the hospital the tumor was noticeably enlarged, even to twice the size when first noticed.

On April 27th, early in the morning, while carrying a heavy tray of bread, stumbled and fell, striking right side over edge of barrel standing near. After about two hours, on account of pain, was compelled to quit work; tumor became larger; pain very severe. At this time he could not void urine, and at 4 P. M. was catheterized by Dr. J. Wilson Shields, and bloody urine withdrawn; pulse, 96; respiration, 20; temperature, 100° F.; leukocyte count, 15,000. The tumor was round and smooth, and extended 6 cm. above plane of umbilicus, and into pelvis 14 cm. to right of median line, and 4 cm. to left of median line; tumor moved with respiration. Peritonitis not present, which was evident by the free excursions of the diaphragm, and free abdominal breathing.

Palpation revealed a smooth, fluctuating tumor, exquisitely sensitive; colon could be palpated on upper surface of tumor, and could be moved up and down. The tumor was not to be palpated in the lumbar region, and a complete examination was not possible on account of pain.

Percussion: There was tympanitic sound elicited between tumor and liver, also to left of tumor; bladder was empty (had been catheterized); dullness above the symphysis. Auscultation of abdomen negative. No increase of peristaltic movements. On account of poor condition of patient it was concluded not to make bladder or ureteral examination.

Diagnosis: Most probable diagnosis in consideration of the history, hydro-nephrosis of movable kidney with torsion of the pedicle, which was the diagnosis made by Dr. J. Wilson Shields, but on account of the position of the tumor there was an element of doubt. Stomach, liver and gall-bladder disease could be eliminated with a fair degree of certainty. Pancreatic and mesenteric cysts could not be excluded, as the tumor was undoubtedly retro-peritoneal; echinococcus cyst had also to be considered. Ileus, invagination and volvulus of cecum could be excluded quite easily; rupture of the bladder, also mentioned, but excluded, as also aneurism, for there was neither pulsation nor bruit; tuberculous peritonitis, as well, was excluded.

As indications for operation were imperative, patient was prepared immediately for abdominal section. There was a tumor the size of a coconut extending from right semilunar line to point midway between umbilicus and left semilunar line, being below a line drawn transversely through the umbilicus, the point of greatest prominence.

Incision was made over greatest prominence, and a quantity of serous fluid was evacuated from abdominal cavity as soon as peritoneum was opened. A lobular tumor presented which could only be delivered after the posterior parietal peritoneum was incised, as it lay in a retro-peritoneal recess. With the exception of the appendix vermiformis, which was adherent to its anterior surface, there were no adhesions. Only after considerable difficulty could the tumor be recognized as the kidney. In view of the fact that there was so little kidney tissue remaining, and the proximal portion of the ureter was contracted and twisted, it was determined to perform a nephrectomy after the left kidney was palpated. The retro-peritoneal recess was closed with a narrow gauze drain, and abdomen closed. Patient passed 900 cc. of urine in first 12 hours; uneventful convalescence.

Closure of Tracheotomy Wounds.

T. C. Hoover, Columbus, Ohio (*Journal A. M. A.*, June 3d), reports a case of low tracheotomy for removal of a foreign body that was treated by immediate closure with fine catgut throughout, beginning with the trachea. No drainage was used, and the healing was prompt and uneventful.

*Read before the San Francisco Polyclinic Gathering, May 6, 1905.

SOME REMARKS ON THE TREATMENT OF COMPOUND FRACTURES.*

By G. N. DRYSDALE, M. D., Eureka.

I HAVE chosen as a subject for this paper the treatment of compound fractures. I have done so because my location being in the center of the redwood lumbering industry, we probably have a larger number of such accidents than in most places with the same population. I don't propose to give you anything exhaustive on the subject or to offer anything new, but I would like to mention some points in the treatment which from my experience seem to me worthy of mention. I have, therefore, headed my paper, "Some Remarks on the Treatment of Compound Fractures."

It will be well before taking up the treatment of these accidents to mention some of the causes and the condition of the injured parts immediately after the injury. The causes of compound fracture are usually given as direct or indirect violence. Indirect violence usually means some twisting or displacement of the fragments following a fracture, which causes the ends of the fragment to puncture the overlying tissues, and need not be further mentioned. The direct causes are many and varied, such as blows from falling timber or limbs of trees, machinery accidents when a limb is caught and crushed in revolving machinery. A common cause in our locality is the slipping of the large cables used to haul the logs out of the woods. One end of the cable is attached to a stationary engine, and the other, perhaps half a mile away, to a large redwood log, which is towed along an improvised road. To guide the cable around turns in the road, it runs over pulleys. Frequently the cable slips while the load is being hauled, and if a man is unfortunate enough to be on the wrong side of the cable when it slips, he is generally a fit subject for a hospital or an undertaker when he is picked up. With a fracture caused in this manner we often have a combination of direct and indirect violence. A blow on the leg, for instance, will cause a fracture of the bones and laceration of the tissues on the side that was hit, and the force of the blow drives the fragments through the tissues on the other side.

As to the condition of the parts immediately after the accident we find all grades of severity of injury from the simple fracture with small punctured wound of overlying tissues, to severe contusion and laceration of the tissues with comminution of the fragments of bone. I would divide these injuries according to their severity into simple fractures of bone with small wound of overlying tissues, simple fractures of bone with extensive laceration and contusion of overlying tissues, multiple fractures of bones with severe laceration and contusion of overlying structures. Most of these accidents happen to men while working in the woods, mills or around machinery, and as a rule we find besides the injury to the tissues the wound is covered with dirt of all kinds from ordinary dust, bark and charcoal to grease from machinery; and oftentimes it is ground right into the tissues.

In treating these accidents much depends on the first dressing. This and the after treatment can be carried out better in a well-equipped hospital than any place else, and I think all cases should be moved to a hospital as soon as possible, if one is within easy reach. In the meantime a temporary dressing can be applied so that the patient can be moved without further injury. In many of the cases some temporary retentive apparatus is applied over the clothing by fellow workmen, and the patient sent at once to a hospital, so that we see our patient for the first time in the hospital.

It is almost needless to say that in preparing to dress these cases our preparation of operating room, ourselves and assistants should be thorough. Primary union of the wound in the soft tissues is the object

*Read at the Thirty-fifth Annual Meeting of the State Society, Riverside, April, 1905.

to be aimed at in all cases when it is possible, and even where it is not possible every source of infection that it is possible to remove should be removed.

We will pass over the preliminary preparation of the patient, taking it for granted that the preliminary examination of the injury has been made, dirty clothing removed and the patient prepared for the operating room, where the real dressing is to be done.

In most of the simpler cases those with a small punctured wound of the overlying tissues, it is sufficient to shave and cleanse the surrounding skin thoroughly, cauterize or incise the edges of the wound, seal or suture and then seal the wound with collodion, and treat the fracture as a simple one. In cases where the injury to the soft tissues is more severe, treatment, I think, should be more radical. Even if the opening in the skin be small, I think we should enlarge it, examine the wound thoroughly, remove blood clots, badly lacerated tissue and loose fragments of bone, arrest hemorrhage, cleanse the wound thoroughly with saline solution, wire the fragments if necessary, and close by suture with the idea of getting primary union. The question of drainage in these cases of medium severity is a question of judgment on the part of the operator. I think if the tissues are not too badly contused, and it is possible to bring them together so as to obliterate dead spaces, I prefer to close completely.

In the very severe cases, where there is much laceration and destruction of the tissues, with perhaps foreign particles ground into the flesh, our treatment is different, and these are the cases that I had in mind when I started this paper. In these cases primary union is out of the question, but with thoroughness in the first dressing and careful watching afterward most will heal kindly. Our first dressing should be thorough and radical. The wound should be opened freely so that all parts of the wound can be examined. Loose fragments of bone should be removed, badly lacerated and contused tissue trimmed off, and foreign matter removed by thorough washing. In doing this I prefer to have an esmarch applied so as to render the field of operation bloodless, and in this condition foreign particles are more easily recognized; then with a sterile hand brush and hot saline or Liquor Cresolis Compositus solution carefully but thoroughly scrub the tissues. Follow this with copious irrigation with saline solution, opening up all parts of the wound. With the wound cleansed, wire the bone fragments. The wiring may not be of any permanent benefit in these cases, but it steadies the fragments at least during the subsequent dressings. Then remove the esmarch and arrest hemorrhage. Some sutures may be applied loosely, but free drainage is an essential, either by leaving the wound open or by making free counter-openings so as to allow no pockets in which the secretions may collect. For a dressing I prefer moist dressings from the beginning, gauze wrung out of hot boracic acid solution or weak Liquor Cresolis Compositus and covered with rubber tissue, and over this plenty of absorbent cotton.

The after treatment of these cases is even more important than the first dressing. In spite of our best endeavors in some cases we will get infection, and this must be combatted by constant care as to drainage, hot compresses saturated with some antiseptic, and changed frequently. In some cases continuous irrigation with a similar antiseptic is necessary. In other cases the severity of the injury itself will cause sloughing and the separation of the dead tissue will require encouragement with moist dressings and the same careful dressings as in the infected cases. After the inflammatory process has subsided, healing, I think, takes place more kindly for some time with moist dressings than dry. At a later stage there will probably be some necrosis of bone that has been denuded of periosteum, and this requires attention. In this, however, I think we should be conservative. I have been surprised to see the small amount of bone lost in cases where a large amount

had been stripped of periosteum, and I think nature will tell us how much should be removed better than we can find out; and non-interference does not delay healing or union in most cases. Sequestra should, of course, be removed whenever found.

The question of retentive apparatus, while always important in fracture cases, is, I think in these severe cases of compound fracture, for a time at least, of secondary importance. Careful dressing, daily or oftener, is essential, and any splint that is used must be applied with this object in view. Later, when the external wound is healing kindly, the question of a suitable splint becomes of prime importance. In the beginning some apparatus should be applied that will support the limb firmly and comfortably, and that can be removed easily, oftentimes a pillow covered with a rubber sheet and pinned firmly around the limb with sand bags on either side will answer best. Later, when the necessity for a permanent splint arises, the same rules apply as in other fractures, excepting that we still have an open wound that requires dressing, and we must provide for this. As a rule plaster of Paris will be found the best material for a splint, either as a solid cast with windows cut over the wound or applied in strips so as to form well-fitting splints that can be removed.

Our results in some of these cases so far as the length of the limb, or sometimes the straightness of the limb, is concerned may be far from perfect; but if we succeed in getting bony union and a useful limb for our patient, even if it does not look well, we may have gotten an excellent result. As an example I would like to cite the following case:

M. G., age 27, while working in the redwoods, was struck with a cable that slipped in the manner I described at the beginning of this paper. He was standing with his full weight on his right leg, and the cable struck him on the outer side of the right leg just above the ankle. The result was a compound comminuted fracture of the right tibia and fibula about 3 inches above the ankle joint, with severe laceration and contusion of the soft tissues. A temporary splint was applied by some of the woodsmen over his clothes, and he was put on a train and sent to the hospital, where I saw him about 3 hours after the accident. Upon removing the clothing I found a fragment of the tibia about an inch and a half long and half an inch wide lying loose in the clothing, the fragments of the tibia were protruding through a large wound on the inner side of the leg, and another wound on the outer side exposed the fibula; circulation in the foot was good. The patient was cleaned up and removed to the operating room, where I dressed the wound after the manner I have described, opening the wound thoroughly, removing several pieces of loose bone, trimming away badly lacerated tissues, cleansing the wound thoroughly and wiring the fragments. I did not do much stitching, as I expected swelling and probably sloughing, and I wasn't disappointed. Ten days afterward the tibia was exposed to view through a hole that seemed to cover most of the inner side of the ankle, and another large one exposed the fibula, and it looked as if the foot might drop off. There was not much inflammation in the surrounding tissues, and the circulation of the foot remained good. After the sloughing tissues separated, the wounds began to granulate, and gradually filled in, but it was a slow process. At the end of 7 weeks the wounds had pretty well filled in, and it began to look encouraging, but there was no effort at union. At the end of the eleventh week the wound over the fibula had completely closed, and the other one almost so, and the leg felt firmer. During this time I kept the leg in a fracture box, removing it daily for dressing. I discarded the fracture box at this time and applied a plaster cast, which I cut on both sides the next day. This made a well-fitting cast that I could remove when necessary for dressing. At the end of 12 weeks I allowed the patient on crutches, and at the end of 4 months there was a complete bony union, and the patient began putting weight on his foot. During the fifth month two or three small pieces of bone were removed from the wound over the tibia, and at the end of the fifth month healing was complete and the patient walked without any assistance. There was some overlapping of the fragments and nearly two inches of shortening, but the patient now walks without a noticeable limp. Looking at the leg now, without any history of the case, one would consider it a bad result, but I look upon it as one of the best results I have had.

My ideas as to the treatment of these severe cases of compound fracture may be summed up as follows:

Thorough and radical treatment at the first dressing, constant and careful attention to the little details of the dressings following, with lots of patience both on the part of the surgeon and the patient.

So far I have said nothing about amputation. I have left that to the last, as I think it should be the last thing thought of in these cases. Of course, we meet with some cases where the injury is such that amputation has to be done at once; but I think if there is a possible chance to save a limb for our patient we should try it.

Patent Medicines: A Good Suggestion.

ROGERSVILLE, Tenn., September 13, 1905.

To the Editor: Under separate cover I am to-day mailing you a marked copy of the *Rogersville Review*, a weekly newspaper published in this, a town of about 3000 inhabitants. I have had the editor copy your editorial¹ of September 2d on the patent medicine fraud as it prevails in the United States with special reference to peruna. These little weekly papers circulate among the rural people, where every issue is read through, ads and all alike. I would suggest that you induce every member of the American Medical Association to have this or some like article occasionally brought out in his home paper. Surely all the physicians of a town would have sufficient influence with their local paper to do this. I assure you that it would work wonders. The people at large have never heard anything but praise of these nostrums, and they fully believe that the ads are written and sanctioned by the medical profession.

This plan would doubtless not work in the larger cities where the advertising bills are large, but it could very easily be done with the small daily and weekly papers, published in villages and towns, as you will see. I propose to have some articles of the kind appear every week. The sums paid these small papers for carrying patent medicine ads is a mere pittance.

J. E. MILLER, M. D.

—*Journal A. M. A.*, September 23, 1905.

Thyroid Disease in California.

H. C. Moffitt, San Francisco (*Journal A. M. A.*, September 16th), writes interestingly on thyroid disease in California. Observation has convinced him that thyroid disease is more common in San Francisco than in many other cities, and he has studied the subject by correspondence with other physicians throughout the state. Goiter is more common, especially about San Francisco bay, and less frequent in the southern part of the state and in the mountains, and is endemic in certain portions of the northern section. Myxedema seems to be more frequent in San Francisco, perhaps because most patients drift there. He has reports of 53 cases in that city and 33 throughout the state, excluding *formes frustes*, of which he has notes of 11 cases. These are characterized by dry skin, scaling of the scalp, thinning of the eyebrows and loss of hair from the neck and in the axillæ, pains in the knees and ankles and between the shoulders, and fat pads about the upper back and clavicle are characteristic. Of sporadic cretinism, he has collected 61 cases altogether, 35 of them in San Francisco. Exophthalmic goiter seems to be much more common in bay counties than elsewhere in the state, and he remarks on the danger of the use of the iodine preparations, especially when a goiter exists, however small. He has had several cases of iodism in patients with small goiters, and he suggests the possibility of the strong sea winds in San Francisco affecting the frequency of cases. The therapy of thyroid conditions is discussed at some length. The reports as to thyroid medication in myxedema and cretinism are enthusiastic; large doses are not required, and they may produce unpleasant symptoms in myxedema. He has seen good results in exophthalmic goiter from long-continued faradism. He thinks many cases of exophthalmic goiter are amenable to surgery, and that more attention should be given to the statement of Horsley that division of the isthmus alone leads to retrogressive changes and shrinking in the rest of the gland.

¹"A Miserable Outrage," *The Journal*, Sept. 2, 1905, p. 722.

NEPHRO-PHONOTOSCOPE AND URETO-RENAL CALCULI.

By GEORGE L. EATON, M. D., San Francisco.

WITHIN the last decade many urological instruments have been invented for the purpose of determining disease of the genito-urinary tract. Prof. Nitze served the profession well when he produced the cystoscope, and with it we are able to determine with exactitude many pathological conditions of the kidney and bladder, and thereby avoid many exploratory operations. Still, at the present time urologists are handicapped in as much as so few instruments of practical value are at hand by which one is able to determine the true state of affairs.

Since the advent of kidney and renal catheterization, we are in a fair way of determining which kidney is at fault, and also the class of inflammation we have to contend with, as well as the functioning capacity. Dr. Winfield Ayres of New York has recently popularized kidney therapy by lavage of the renal pelvis to such an extent that his statistics go to show that a large percentage of kidney lesions are amenable to treatment and many pyelitic conditions are reported permanently cured.

Quoting directly from his article read before the American Urological Association in 1905, concerning the etiology of renal calculus: "Catarrhal pyelitis may exist for a long time and do no apparent harm; it, however, presents a beautiful field for the growth of a stone, and it is probable that all calculi have as their starting point a pyelitis—" It would be well at this point to consider the etiology of pyelitis. If it were possible to catalogue every pyelitic case in existence, in both male and female, I feel positive that at least 80% would give a history of gonorrhea, with one or more of the subsequent complications, e. g., cystitis, posterior urethritis, proctitis, vesiculitis, vasitis, epididymitis, metritis, endometritis, oöphoritis, salpingitis, etc. The other 20% would represent constitutional ailments with a predisposition toward nephritic complications.

Granting that pyelitis occupies an important role in the etiology of renal and ureteral calculi, we are now in a position to discuss the formation of the calculus, whether it be renal or ureteral; they must all have a nucleus for a starter. To begin with, we have an engorgement following an inflammatory process, which has a tendency to obstruct the lumen of the ureter nearest to the greater area involved, which would include the pelvic ureter. With this condition of affairs we should naturally expect a retardation in the flow of urine, thereby causing a gradual dilatation of the kidney pelvis and a resulting hydronephrosis with an accumulation of uric acid and oxalate of lime which, as you will readily see, may act as a nucleus and in a very short time produce a calculus.

Symptoms of renal and ureteral calculus are variable, in fact so much so that pain may be transferred to some distant part instead of being located in the organ affected. Bladders are frequently sounded, irrigated, and opened, ovaries and the appendix are removed, all to no purpose; as in one very striking instance in which the bladder was opened for stone, all symptoms pointing to the same, but upon subsequent examination and operation a renal calculus weighing 260 gr. was found.

A calculus may develop, and traverse the urinary passage, and escape without giving rise to any symptoms, while on the other hand the most excruciating pain with marked nervous symptoms and high fever will sometimes accompany one of much smaller size. Apart from an attack of renal colic, one of the most common symptoms is the pain referred to, the lumbar region, the front of the abdomen over the affected kidney and down the course of the ureter. Still all of the direct and reflex symptoms may be absent, and the only sign that attracts our attention may be the character of the urine, in which after being